

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method of inducing immune tolerance to an antigen in a mammal, comprising:
 - (a) administering an engineered population of white blood cells that express an antigen to a mammal one or more times thereby inducing at least partial immune tolerance of the antigen in the mammal.
2. (Original) The method of claim 1 further comprising:
 - (b) engineering a population of white blood cells to express the antigen.
3. (Original) The method of claim 2 further comprising:
 - (c) obtaining the population of white blood cells from the individual prior to (b).
4. (Currently Amended) The method of claim 2 wherein (b) comprises inserting a nucleic acid encoding the portion of the antigen ~~or a nucleic acid that encodes an enzyme capable of producing part of the antigen~~ into the white blood cells.
5. (Currently Amended) The method of claim 4 wherein the nucleic acid encoding the portion of the antigen ~~or a nucleic acid that encodes an enzyme capable of producing part of the antigen~~ is inserted into the white blood cells by a replication defective adenovirus.
6. (Original) The method of claim 1 wherein the antigen is a carbohydrate.
7. (Original) The method of claim 6 wherein the antigen is a blood group antigen.
8. (Original) The method of claim 7 wherein the blood group antigen is blood group A antigen, blood group B antigen or both.
9. (Original) The method of claim 2 wherein (b) occurs in vitro.

10. (Original) A white blood cell produced by engineering the white blood cell to express an antigen.

11. (Original) A pharmaceutical composition comprising the cell of claim 10.

12. (Original) The method of claim 1 further comprising:

(d) exposing the mammal to the antigen.

13. (Original) The method of claim 11 wherein (d) comprises transplanting a tissue comprising the antigen into the mammal.

14. (Currently Amended) The method of claim 1 wherein the mammal is a human or the cell is a human cell.

15. (Original) The method of claim 12 further comprising:

(e) measuring the immune reaction of the mammal to the antigen.

16. (Original) The method of claim 15 further comprising:

(f) comparing the immune reaction of the mammal to the antigen with the immune reaction of a control mammal that had not been administered an engineered population of white blood cells that express the antigen.

17. (Original) The method of claim 6 wherein the antigen comprises the α -gal epitope [Gal α 1-3Gal β 1-(3)4GlcNAc-R].

18. (Original) The method of claim 1 wherein the mammal is essentially free of circulating antibodies that react specifically with the antigen.

19. (Original) The method of claim 1 wherein the engineered white blood cells comprise lymphocytes.

20. (New) The method of claim 1 wherein the antigen is a protein antigen.

21. (New) The method of claim 20 wherein the protein antigen is an allo-antigen.

22. (New) The method of claim 21 wherein the allo-antigen is a MHC antigen.
23. (New) The method of claim 20 wherein the antigen is an allergen or an autologous antigen that induces an autoimmune disease.
24. (New) The method of claim 2 wherein (b) comprises inserting a nucleic acid that encodes an enzyme capable of producing part of the antigen into the white blood cells.
25. (New) The method of claim 24 wherein the nucleic acid that encodes an enzyme capable of producing part of the antigen is inserted into the white blood cells by a replication defective adenovirus.
26. (New) The method of claim 1 further comprising
 - (b) removing substantially all cells that react with the protein antigen from the mammal prior to (a).
27. (New) The method of claim 1 further comprising
 - (b) suppressing the T cell response of the mammal concurrently with (a).